www.ThePharmaJournal.com

# The Pharma Innovation



ISSN (E): 2277-7695 ISSN (P): 2349-8242 NAAS Rating: 5.23 TPI 2023; 12(5): 3724-3727 © 2023 TPI

www.thepharmajournal.com Received: 21-03-2023 Accepted: 24-04-2023

#### Lopamudra Mohapatra

Department of Extension Education and Communication Management, Hyderabad, Professor Jayashankar Telangana State Agricultural University, Telangana, India

#### R Neela Rani

Department of Extension Education and Communication Management, Hyderabad, Professor Jayashankar Telangana State Agricultural University, Telangana, India

#### R Geetha Reddy

Department of Extension Education and Communication Management, Hyderabad, Professor Jayashankar Telangana State Agricultural University, Telangana, India

#### T Kamalaja

Department of Food and Nutrition, Hyderabad, Professor Jayashankar Telangana State Agricultural University, Telangana, India

Corresponding Author: Lopamudra Mohapatra

Department of Extension Education and Communication Management, Hyderabad, Professor Jayashankar Telangana State Agricultural University, Telangana, India

# Study on existing practices of complementary feeding followed by rural women

# Lopamudra Mohapatra, R Neela Rani, R Geetha Reddy and T Kamalaja

#### Abstract

Adequate nutrition during infancy and early childhood is crucial to ensure the proper growth and development of children to their full potential. Complementary feeding denotes the transition from exclusive breastfeeding to a more diversified and balanced diet that supports the infant's nutritional needs and development. Hence, the present study was conducted to find out the existing complementary feeding practices followed by rural women. A cross-sectional study was carried out in the rural area of Medak district of Telangana. Data were collected by interview method among 120 mothers using a predesigned pretested interview schedule. Information regarding profile characteristics, complementary feeding practices and preparation of complementary foods, etc were collected. In this study, it was found that about half (45.83%) of the respondents were following poor complementary feeding practices. Less than half (47.50%) were not giving any homemade complementary foods to their children. Profile characteristics like age, occupation and Income of the respondents were having positive and significant correlations with the complementary feeding practices.

Keywords: Complementary feeding, exclusive breast feeding adequate nutrition and nutritional needs

### Introduction

Complementary feeding is a significant milestone in an infant's life when solid foods are introduced alongside breast milk or formula. It denotes the transition from exclusive breastfeeding to a more diversified and balanced diet that supports the infant's nutritional needs and development. The World Health Organisation (WHO) recommends that complementary foods be introduced around the age of 6 months. The purpose of complementary feeding is to provide additional nutrients and energy to meet the growing demands of infants. However, as newborns growth and their nutrient requirements increase, introducing solid foods becomes necessary to meet their nutritional needs.

Therefore, it is important to offer a wide range of nutrient-rich foods including fruits, vegetables, grains, proteins and healthy fats. This diverse diet helps infants receive a balanced intake of vitamins, minerals and macronutrients necessary for their optimal growth and development. While introducing complementary foods, the texture and consistency of foods should be appropriate for the infant's age and developmental stage. Complementary feeding practices also emphasize the importance of safe food handling and preparation. Ensuring proper hygiene and cleanliness during food preparation helps prevent food borne illnesses and keeps infants healthy. Utensils, surfaces, and foods should be thoroughly cleaned, and all foods should be cooked properly to reduce the risk of contamination.

If complementary feeding is not done correctly, it may be followed by diarrhoea and long term development retardation, marked by recurrent and persistent infections which may be fatal. The primary cause of malnutrition is inadequate food and nutrient consumption. Poor nutrition leads to underweight infants and stunting. (Rao *et al.*, 2011) [7]

The National Family Health Survey (NFHS) has provided useful national and state-level information on Infant feeding practices. Available data showed a gross inter-state variation. In Telangana around 31.8% of the children have less weight for age. There were a little decline in Percentage of children under age 5 years as malnourished according to three anthropometric indices of nutritional status in rural areas of India: height-for-age (41.2%) NFHS-4 (37.3%) NFHS-5, weight-for-height (21.4%) NFHS-4 (19.5%) NFHS-5, and weight-for-age (38.3%) NFHS-4 (33.8%) NFHS-5. Still, Protein-energy malnutrition among children is a major issue in the state. Keeping all these important points into consideration, the present study aimed to assess the existing practices of complementary feeding followed by rural women having children between the age group of 6 months to 24 months.

#### Methodology

A cross-sectional study was conducted among mothers of children within the age group of 6 months to 24 months in Medak district of Telangana. Medak district was selected purposively according to the highest incidence of malnutrition. Four mandals were selected randomly from the district and from each mandal two villages were selected. Thus, a total of 120 women respondents were selected. The selected respondents were interviewed personally with the help of a self-structured interview schedule. The data collected were tabulated and statistically analyzed to interpret the results. The statistical tests i.e. percentage, frequency and correlation tests were used for analyzing the data.

# **Results and Discussion**

### **Profile characteristics of the respondents**

In the present study, it was found that the majority (60.00%) of the respondents belonged to the age group of less than 25 years. This might be due to the early marriage of the respondents leading to the early conception of a child. With regard to education, 34.17 percent of the respondents had education up to primary and middle school, 25.84 percent of the respondents were illiterate. The reason might be in rural areas women's education is not considered important and also villages with poor infrastructure with no proper school

facilities, parents hesitate to send their daughters to other villages or towns for education. Table 1 illustrated that 36.67 percent of the respondents had agriculture as the primary occupation followed by housewives (33.33%). As agriculture is the predominant activity of the respondent's in the study area, this might be due to the reason that most of the respondents were illiterates and were working in their lands. Also as the respondents were mothers of a child aged between 6-24 months so they were staying at home as housewives to take care of their children. It could be stated that about half (50.83%) of the respondents belonged to the medium-income group followed by low income and high income group. This might be the reason that most of the respondent's occupation was agriculture, housewife and also due to lack of more income generating enterprises. It was observed from the Table 1 that 67.50 per cent of the respondents belonged to nuclear family followed joint family and extended families. It's due to modern economic and social development in society that the joint family tradition had transformed from extended to nuclear families. Table 1 also indicated that in rural areas, majority (79.16%) of the respondents were having 1-2 children followed by 20.84 per cent of the respondents had 3-4 children. This might be due to increased awareness by different national and international programs for controlling population growth.

Table 1: Distribution of the respondents based on the profile characteristics

(n=120)

S. No.	Category	Frequency	Percentage (%)			
1. Age (In Years)						
a)	Less than 25	72	60.00			
b)	Between 25-35	37	30.83			
c)	More than 35	11	9.17			
2. Educat	ion of mother					
a)	Illiterate	31	25.84			
b)	Primary and Middle School	41	34.17			
c)	High School	28	23.33			
d)	College education	20	16.66			
3. Occupa	tion of mother					
a)	Agriculture	44	36.67			
b)	Labour	25	20.83			
c)	Small business	09	7.50			
d)	Government job	02	1.67			
e)	Housewife	40	33.33			
4. Income	(Annual in Rupees)					
a)	Low income (Below 60,000)	57	47.50			
b)	Medium income (60,000-1,20,000)	61	50.83			
c)	High income (above 1,20,000)	02	1.67			
5. Family	Type					
a)	Nuclear Family	81	67.50			
b)	Joint Family	36	30.00			
c)	Extended family	03	2.50			
6. Numbe	r of children					
a)	1-2	95	79.16			
b)	3-4	25	20.84			

# Existing complementary feeding practices followed by rural women

Based on the complementary feeding practices followed by rural women they were categorized into three categories namely poor practice, average practice and good practice. The highest score was given to the good practice whereas the lowest score was given to the poor practice.

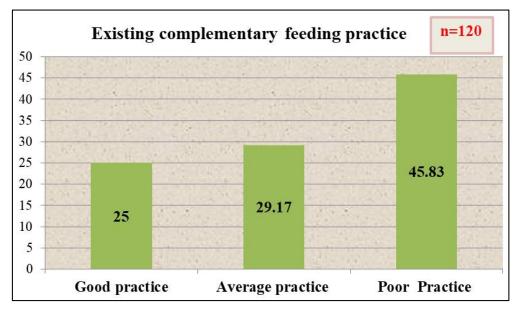


Fig 1: Distribution of the respondents based on the existing complementary feeding practices

Figure 1 indicated that in rural area, about 45.83 per cent of the respondents were following poor complementary feeding practice followed by average practice (29.17%) and good practice (25%). The major reason was that majority of the respondents didn't have proper knowledge regarding complementary feeding and they were following only those practices which were suggested by their family members and relatives. Further the practices were followed by the respondents were greatly influenced by customs and traditions found in the study area. The present study was contradictory to (Olatona *et al.*, 2017) <sup>[6]</sup> where they found out that less than half (47%) of the mothers had good level of practice about complementary feeding whereas about few (43.9%) of the respondents had fair level of practice and only (9%) of the respondents had poor practice.

**Table 2:** Distribution of the respondents based on the home made complementary foods

			n=120
S. No.	Homemade complementary food	F	%
1.	Rice and Dal		35.00
2.	Java 06		05.00
3.	Uggu	11	09.17
	Others		
4.	(Mashed rice, Dal, Fruit Juices, Mashed	04	03.33
	vegetables, egg)		
5.	Not using homemade complementary foods	57	47.50
Total		120	100.00

Table 2 indicated that out of the total respondents, less than half (47.50%) were not giving any homemade complementary foods to their children followed by (35%) of the respondents were given only rice and dal as a homemade complimentary food, uggu (9.17%), Java (5%) and other foods (3.33%). This might be due to having no knowledge on foods that can be prepared with locally available food products. Gupta (2019) [2] conducted a study in rural areas of the Faizabad district of Uttar Pradesh with a total of 352 respondents. She found out that only 30 (10.64%) of the respondents were preparing special homemade food for their children. Out of which 10 (33.33%) of respondents gave Dalia to their children followed by 8(26.67%) gave khichri and dalia with halwa/khichri was

offered by 20 per cent of respondents to their children. Equal per cent of mothers (10%) gave halwa and all special foods. In contrast to the study Bidwe (2018)<sup>[1]</sup> in her study found out that 148 urban and 155 rural mothers introduced homemade weaning foods to their children. It was seen that out of 155 rural mothers (97.5%) gave mashed rice as a weaning food and (94.8%) of the mothers gave khichdi.

**Table 3:** Distribution of the respondents based on the readymade complementary foods

			n=120
S. No.	Readymade complementary food	F	%
1.	Commercially available Readymade food	34	28.33
2.	Balamrutham	22	18.33
3.	Commercially available Readymade food and Balamrutham		07.50
4.	Not using readymade food		45.84
Total			100.00

Table 3 indicated that out of the total respondents, 45.84 per cent were not giving any readymade complementary foods to their children followed by 28.33 percent of the respondents were giving only commercially available readymade food, Balamrutham (18.33%) and commercially Readymade food with Balamrutham (07.50%). Due to low annual income and poor knowledge regarding feeding practice, respondents were not using any readymade CFs. It was also seen that though government is providing supplementary foods (Balamrutham) women were not feeding properly to their children due to their carelessness and improper knowledge regarding nutritional benefits of supplementary foods. Bidwe (2018) [1] in her study found that out of 400 selected mothers 54 urban and 43 rural used commercial weaning food. In rural areas, about (39.50%) of the respondents were giving biscuits, both Farex/ Cerelac and Biscuits (32.55%) and Farex/ Cerelac (27.90%). Even the results of the study conducted by Lodha and Bharti (2013) [3] indicated that milk and biscuits were fed to the infants by the majority of the mothers.

# Correlation between profile characteristics of the respondents with Complementary feeding practices

Correlation between profile characteristics of the respondents and complementary feeding practices was computed. Data presented in the table 4 indicated that there was a positive and significant relationship between the age of mother and complementary feeding practices followed by respondents. This implies that when age increases the complementary feeding practices also increase. The reason might be that with increase in age, mother's experience regarding complementary feeding practice also increases and shows a positive impact during feeding practice.

**Table 4:** Correlation between profile characteristics of the respondents with Complementary feeding practices

n = 120

S. No.	Profile characteristics	Complementary feeding Practices 'r' value
1.	Age of Mother	0.201*
2.	Education	0.101 NS
3.	Occupation	0.286**
4.	Income	0.191*
5.	Family type	0.031 NS
6.	Number of children	0.021 NS

<sup>\* =</sup> Significant at 0.05 level of probability

NS = Non- significant

It can also be inferred from the table 4 that there was a positive and significant relationship between the occupation of the respondent and complementary feeding practices. This implies that when the occupation of respondent changes from low income generating occupation to high income generating occupations the complementary feeding practices also increases. This finding was in the agreement with the findings of Olatona *et al.* (2017) <sup>[6]</sup> where they also found that mother's occupation was significantly and positively associated with the overall complementary feeding practice. Income of the respondents was positively correlated with complementary feeding practices followed by respondents also. It implies that when the income of the family increases the complementary feeding practices also increases.

## Conclusions

Complementary feeding practices play a vital role in supporting the nutritional needs and development of infants. By timely introducing variety of nutritious foods, following good complementary feeding practices and ensuring proper hygiene and safety can promote the overall well-being of their infants during this crucial stage of growth. The study concluded that about half of the respondents were following poor complementary feeding practices. It was due to their lack of knowledge regarding complementary feeding and traditional knowledge in following the practices. It was also found out that though government is providing supplementary foods (Balamrutham), respondents were not giving properly to their child due to negligence and lack of knowledge. To tackle the situation, Government institutions and Non-Governmental organizations need to create awareness among the rural people regarding the importance of complementary feeding by arranging awareness programmes.

## Acknowledgements

The authors would like to thank all the participants for their

contributions to the study and are immensely grateful for the constant support and guidance from the Department of Extension education and Communication management.

**Funding:** No funding sources

Conflict of interest: None declared

#### References

- 1. Bidwe AR. Study on Infant and Young child feeding practices, formulation of weaning foods and their popularization. Ph.D. Thesis. Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani, India; c2018.
- Gupta V. A study on complementary feeding practices prevalent in rural areas of Faizabad District. Ph.D Thesis. Sam Higginbottom University of Agriculture, Technology and Sciences, Allahabad (Prayagraj), India; c2019
- 3. Lodha S, Bharti V. Assessment of complementary feeding practices and misconceptions regarding foods in young mothers. International journal of food and nutritional sciences. 2013;2(3):85-90.
- 4. National Family Health Survey (NFHS- 4), 2015-16. Ministry of Health and Family Welfare. http://rchiips.org/NFHS/pdf/NFHS4/TG FactSheet.pdf.
- National Family Health Survey-5, 2019- 21. India Fact Sheet. Available from: https://main.mohfw.gov.in/sites/default/files/NFHS-5\_Phase-II\_0.pdf
- Olatona FA, Adenihun JO, Aderibigde SA, Adeniyi OF. Complementary Feeding Knowledge, Practices and Dietary Diversity among Mothers of Under- Five Children in an Urban Community in Lagos State, Nigeria. International Journal of MCH and AIDS. 2017;6(1):46-59.
- 7. Rao S, Swathi PM, Unnikrishnan B, Hegde A. Study of Complementary Feeding Practices among Mothers of Children Aged Six Months to Two Years A Study from Coastal South India. Australasian Medical Journal. 2011;4(5):252-257.

<sup>\*\* =</sup> Significant at 0.01 level of probability